



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,136	09/17/2003	Allan Thomson	28184-703.201	7186

22918 7590 01/25/2006

PERKINS COIE LLP
P.O. BOX 2168
MENLO PARK, CA 94026

EXAMINER

PEREZ, JULIO R

ART UNIT	PAPER NUMBER
----------	--------------

2681

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/667,136	Applicant(s) THOMSON ET AL.	
	Examiner Julio R. Perez	Art Unit 2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Rappaport et al. (hereinafter Rappaport) [US Pub. 20040143428].

Regarding claim 1, Rappaport discloses a method of verifying a plan for a wireless local area network, comprising: receiving measured wireless local area network data (0038-0040; 0043, the system provides measured signals to measure the performance of the network system); comparing the measured wireless local area network data with expected wireless local area network data (0039-0041), the expected wireless local area network data generated at least from floor plan data about a site of the wireless local area network, and placement and configuration of a plurality of access points of the wireless local area network (0039-0043); and based at least on the measured wireless local area network data, changing one or more of: the floor plan data about the site of the wireless local area network, the quantity of the plurality of access

points, the placement of the plurality of access points, and the configuration of the plurality of access points (0039-0043; 0045; 0058).

Regarding claim 2, Rappaport discloses, wherein the measured wireless local area network data includes radio frequency measurements (0058, lines 27-43).

Regarding claim 3, Rappaport discloses, wherein the measured wireless local area network data includes measured radio frequency signal strength data from the radio frequency measurements and the expected wireless local area network data includes expected radio frequency signal strength data (0039-0043).

Regarding claim 4, Rappaport discloses, wherein the measured wireless local area network data includes measured channel data from the radio frequency measurements and the expected wireless local area network data includes expected channel data (0045).

Regarding claim 5, Rappaport discloses, wherein the measured wireless local area network data includes measured access point position data of the plurality of access points from the radio frequency measurements and the expected wireless local area network data includes expected access point position data of the plurality of access points (0039-0043; 0045; 0058).

Regarding claim 6, Rappaport discloses, wherein the measured wireless local area network data includes media access control address data associated with the radio frequency measurements and the expected wireless local area network data includes expected media access control address data (0039-0043; 0045; 0058).

Regarding claim 7, Rappaport discloses, wherein changing the floor plan data includes making one or more changes in objects in the floor plan data associated with radio frequency attenuation factors (0039-0043; 0045; 0050; 0058).

Regarding claim 8, Rappaport discloses, wherein changing the floor plan data includes making one or more changes in radio frequency attenuation factors associated with objects in the floor plan data (0039-0043; 0045; 0050; 0058).

Regarding claim 9, Rappaport discloses, further comprising: based at least on the measured wireless local area network data, changing one or more of: at least one of quantity, placement, and configuration of one or more distribution system switches at the site for the wireless local area network, the one or more distribution system switches connecting to the plurality of access points (0039-0043; 0045; 0050; 0058).

Regarding claim 10, Rappaport discloses, wherein changing the configuration of the plurality of access points includes making one or more changes in power levels for the plurality of access points (0039-0043; 0045; 0050; 0058).

Regarding claim 11, Rappaport discloses, wherein changing the configuration of the plurality of access points includes making one or more changes in channel assignments for the plurality of access points (0039-0043; 0045; 0050; 0058).

Regarding claim 12, Rappaport discloses, further comprising: generating work order data based at least on the one or more changes for one or more of: the floor plan data about the site of the wireless local area network, the quantity of the plurality of access points, the placement of the plurality of access points, and the configuration of the plurality of access points (0039-0043; 0045; 0050; 0058).

Regarding claim 13, Rappaport discloses, wherein the work order data includes installation instructions for the plurality of access points of the wireless local area network (0039-0043; 0045; 0050; 0058).

Regarding claim 14, Rappaport discloses, wherein the work order data includes installation instructions for one or more distribution system switches connecting to the plurality of access points of the wireless local area network (0039-0043; 0045; 0050; 0058).

Regarding claim 15, Rappaport discloses, further comprising: displaying coverage data, based at least on the measured wireless local area network data (0039-0043; 0045; 0050; 0058).

Regarding claim 16, Rappaport discloses, wherein the coverage data indicates coverage areas of the site serviced by the plurality of access points (0039-0043; 0045; 0050; 0058).

Regarding claim 17, Rappaport discloses, wherein the coverage data is indicated with at least the floor plan data (0039-0043; 0045; 0050; 0058).

Regarding claim 18, Rappaport discloses, wherein the coverage data depends on a technology standard of the wireless local area network (0039-0043; 0045; 0050; 0058).

Regarding claim 19, Rappaport discloses, wherein at least one coverage area supports one or more technology standards of the wireless local area network (0039-0043; 0045; 0050; 0058).

Regarding claim 20, Rappaport discloses, further comprising: displaying capacity data based at least on the measured wireless local area network data (0039-0043; 0045; 0050; 0058).

Regarding claim 21, Rappaport discloses, wherein the capacity data includes one or more throughput rates for stations serviced by the plurality of access points (0039-0043; 0045; 0050; 0058).

Regarding claim 22, Rappaport discloses, wherein the capacity data includes one or more average desired association rates for stations serviced by the plurality of access points (0039-0043; 0045; 0050; 0058).

Regarding claim 23, Rappaport discloses, wherein the capacity data includes one or more quantities of stations serviced by the plurality of access points (0039-0043; 0045; 0050; 0058).

Regarding claim 24, Rappaport discloses, wherein the capacity data includes one or more quantities of active stations serviced by the plurality of access points (0039-0043; 0045; 0050; 0058).

Regarding claim 25, Rappaport discloses, wherein the capacity data includes one or more quantities of total stations serviced by the plurality of access points (0039-0043; 0045; 0050; 0058).

Regarding claim 26, Rappaport discloses, further comprising: displaying floor plan data, based at least on the measured wireless local area network data (0039-0043; 0045; 0050; 0058).

Regarding claim 27, Rappaport discloses, wherein the floor plan data is imported (0039-0043; 0045; 0050; 0058).

Regarding claim 28, Rappaport discloses, wherein the floor plan data is manually drawn via computer (0039-0043; 0045; 0050; 0058).

Regarding claim 29, Rappaport discloses, wherein objects in the floor plan data are associated with radio frequency attenuation factors (0039-0043; 0045; 0050; 0058).

Regarding claim 30, Rappaport discloses, wherein objects in the floor plan data are associated with radio frequency attenuation factors that depend on a technology standard of the wireless local area network.

Regarding claim 31, Rappaport discloses, wherein the radio frequency measurements include access point radio frequency measurements taken by access points of the plurality of access points (0039-0043; 0045; 0050; 0058).

Regarding claim 32, Rappaport discloses, wherein the access points of the plurality of access points take the radio frequency measurements by at least listening to wireless local area network traffic (0039-0043; 0045; 0050; 0058).

Regarding claim 33, Rappaport discloses, wherein the measured wireless local area network data include network statistics (0099).

Regarding claim 34, Rappaport discloses, wherein the network statistics include one or more of: Ethernet statistics, Ethernet errors, radio statistics, and session statistics (0099).

Regarding claim 35, Rappaport discloses, wherein the network statistics are collected for one or more of: the site of the wireless local area network, one or more

Art Unit: 2681

buildings of the site of the wireless local area network, one or more floors of the site of the wireless local area network, one or more portions of the site of the wireless local area network, one or more distribution system switches connecting to the plurality of access points, one or more access points of the plurality of access points, and one or more ports of the one or more distribution system switches (0039-0043; 0045; 0050; 0058; 0099).

Regarding claim 36, Rappaport discloses, wherein the network statistics include one or more of: octet data, packet data, and error data (0039-0043; 0045; 0050; 0058; 0099).

Regarding claim 37, Rappaport discloses, code verifying a plan for a wireless local area network, comprising: code that performs receiving measured wireless local area network data (0038-0040; 0043, the system provides measured signals to measure the performance of the network system); code that performs comparing the measured wireless local area network data with expected wireless local area network data (0039-0041), the expected wireless local area network data generated at least from floor plan data about a site of the wireless local area network, and placement and configuration of a plurality of access points of the wireless local area network (0039-0043); and code that performs, based at least on the measured wireless local area network data, changing one or more of: the floor plan data about the site of the wireless local area network, the quantity of the plurality of access points, the placement of the plurality of access points, and the configuration of the plurality of access points (0039-0043; 0045; 0058).

Regarding claim 38, Rappaport discloses, an apparatus verifying a plan for a wireless local area network, comprising: means for receiving measured wireless local area network data (0038-0040; 0043, the system provides measured signals to measure the performance of the network system); means for comparing the measured wireless local area network data with expected wireless local area network data (0039-0041), the expected wireless local area network data generated at least from floor plan data about a site of the wireless local area network, and placement and configuration of a plurality of access points of the wireless local area network (0039-0043); and means for, based at least on the measured wireless local area network data, changing one or more of: the floor plan data about the site of the wireless local area network, the quantity of the plurality of access points, the placement of the plurality of access points, and the configuration of the plurality of access points (0039-0043; 0045; 0058).

Conclusion

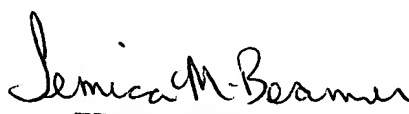
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R. Perez whose telephone number is (571) 272-7846. The examiner can normally be reached on 7:00 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (571) 272- 4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Julio Perez
1/18/06


TEMICA BEAMER
PRIMARY EXAMINER
1/23/06